

## Message Text

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TAGS: ENGR TECH OAS NATO

SUBJ: CCMS: GEOTHERMAN ENERGY PLIOT NATO STUDY -- UNDERGROUND

DRY HOT ROCKS TECHNOLOGY MEETING

1. ACTION ADDRESSEES ARE REQUESTED TO TRANSMIT FOLLOWING INVITATION

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TO APPROPRIATE HOST COUNTRY GEOTHERMAL OFFICIALS TO PARTICIPATE

IN MEETING ON UNDERGROUND DRY HOT ROCK TECHNOLOGY TO BE HELD IN  
LOS ALAMOS, NEW MEXICO, SEPTEMBER 17-19. BEGIN INVITATION:

A. THE UNITED STATES, AS PILOT COUNTRY OF THE NATO COMMITTEE ON  
THE CHALLENGES OF MODERN SOCIETY (CCMS) GEOTHERMAN ENERGY  
PILOT STUDY, INVITES YOU AND OTHER REPRESENTATIVES OF YOUR  
COUNTRY TO ATTEND A MEETING ON UNDERGROUND DRY HOT ROCK  
TECHNOLOGY IN LOS ALAMOS, NEW MEXICO, ON SEPTEMBER 17-19, 1974.

B. AS SECRETARY OF STATE KISSINGER INDICATED TO THE OAS GENERAL  
ASSEMBLY IN ATLANTA, GEORGIA EARLIER THIS YEAR, THE U.S. IS PREPARED  
TO SHARE OUR RESEARCH ON CONSERVATION AND DEVELOPMENT OF ENERGY  
SOURCES. CCMS' ACTION-ORIENTATION AND POLICY OF OPEN PUBLICATION  
ENCOURAGES PARTICIPATION OF NON-NATO COUNTRIES IN AREAS  
OF MUTUAL CONCERN AND INTERESTS AND PROVIDES AN EXCELLENT OPPORTUNITY  
FOR THE EXCHANGE OF ENERGY DEVELOPMENT TECHNOLOGY BETWEEN OUR  
COUNTRIES.

C. AS YOU ARE AWARE, EXPLOITATION OF DRY HOT ROCK AS A SOURCE OF  
GEOTHERMAL ENGERGY INVOLVES DRILLING TO THE ROCK FORMATION, FRACTURIN  
G  
THE ROCK, IF NECESSARY, AND THEN INTRODUCING WATER FOR RECIRCULATION.  
THE RECIRULATED HOT WATER WOULD THEN BE USED FOR POWER GENERATION.  
EXPLOITATION OF DRY GEOTHERMAL RESOURCES IS NOT AS ADVANCED AS THE  
USE OF NATURALLY OCCURRING GEOTHERMAL STEAM OR HOT WATER, BUT AVOIDES  
MANY OF THE ADVERSE ENVIRONMENTAL IMPACTS OF THE STEAM AND HOT WATER  
SYSTEMS.

D. THE PURPOSE OF THE SEPTEMBER 17-19 MEETING IN LOS ALAMOS,  
WHICH IS BEING HOSTED BY THE UNITED STATES ATOMIC ENERGY COMMISSION  
WITH ACTIVE PARTICIPATION BY THE NATIONAL SCIENCE FOUNDATION AND  
U.S. GEOLOGICAL SURVEY AND THE DEPARTMENT OF INTERIOR, IS TO  
EXCHANGE INFORMATION ON THE USE OF THIS SOURCE OF GEOTHERMAL  
ENERGY. IN VIEW OF THE MEETING'S PURPOSE AND OBJECTIVE, IT WOULD  
BE MOST DESIRABLE FOR YOUR COUNTRY TO BE REPRESENTED BY OFFICIALS ON  
THE POLICY LEVEL OR SENIOR SCIENTISTS KNOWLEDGEABLE ABOUT AND  
CONNECTED WITH YOUR GOVERNMENT'S GEOTHERMAL ENERGY PROGRAM  
AND/OR PLANS. THE MEETING WILL BE OF SPECIAL INTEREST TO EXPERTS  
IN ROCK MECHANICS, HYDRAULIC FRACTURING AND HEAT FLUID FLOWS.

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E. THE MEETING WILL BE HELD AT THE PHYSICS AUDITORIUM OF THE  
USAEC'S LOS ALAMOS SCIENTIFIC LABORATOR (LASL). THE PLANNED  
AGENDA IS AS FOLLOWS:

TUESDAY, SEPTEMBER 17 (BEGINNING AT 0900)  
WELCOME AND OPENING STATEMENTS  
DESCRIPTION OF GEOTHERMAL ENERGY PILOT STUDY  
OUTLINE OF AEC GEOTHERMAL PROGRAM

PROGRESS OF LASL DRY HOT ROCK PROJECT  
PROGRESS OF RELATED LASL GEOSCIENCES PROJECT  
REPORTS BY NON-U.S. PARTICIPANTS ON TOPICS SUCH AS  
ROCK MECHANICS, HYDRAULIC FRACTURING, HEAT AND FLUID FLOWS AND  
HOT ROCK RESOURCES.

WEDNESDAY, SEPTEMBER 18

OUTLINE OF NATIONAL SCIENCE FOUNDATION GEOTHERMAL PROGRAM  
PROGRESS OF BATTELLE NORTHWEST MARYSVILLE PROJECT  
OUTLINE OF U.S. GEOLOGICAL SURVEY GEOTHERMAL PROGRAM  
GEOLOGY OF HEMEZ MOUNTAINS, NEW MEXICO  
LOS ALAMOS ROCK-MELTING DRILL PROJECT, "SUBTERRENE"  
GENERAL DISCUSSIONS  
CLOSING STATEMENTS

THURSDAY, SEPTEMBER 19

DEMONSTRATION OF LASL ROCK MELTING DRILL  
VISIT TO UNION OIL COMPANY OPERATIONS IN VALLES CALDERE  
VISIT TO LASL OPERATIONS ON HEMEZ PLATEAU.

F. AS HAS BEEN THE ESTABLISHED PRACTICE FOR ACTIVITIES UNDER THE  
GEOTHERMAL PILOT STUDY, PARTICIPANTS ARE EXPECTED TO BEAR TRANSPORTA-  
TION, DINING AND LODGING COSTS. ROOM RESERVATIONS HAVE BEEN MADE AT  
THE LOS ALAMOS INN (ABOUT 23 DOLLARS PER NIGHT.). THE TOWN OF LOS  
ALAMOS (NEAR SANTE FE) IS ABOUT 60 KILOMETERS NORTH OF ALBUQUERQUE,  
NEW MEXICO. THERE IS AIR TRANSPORTATION AND CAR RENTAL SERVICE  
FROM ALBUQUERQUE TO LOS ALAMOS. THE U.S. WILL ARRANGE SPECIAL  
TRANSPORTATION FOR THE FIELD VISITS ON SEPTEMBER 19.

G. IT IS HOPED THAT PARTICIPANTS WILL ARRIVE BY THE EVENING OF  
MONDAY, SEPTEMBER 16. THE U.S. WOULD GREATLY APPRECIATE KNOWING  
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NAMES AND TITLES OF PARTICIPANTS BY FRIDAY, SEPTEMBER 6, AT THE  
LATEST.

H. IN RESPECT TO THE PLAN TO HAVE REPORTS BY NON-U.S. PARTICIPANTS  
ON SEPTEMBER 17, THE U.S. WOULD APPRECIATE KNOWING AT AN EARLY  
OPPORTUNITY WHETHER YOUR COUNTRY WILL BE SUBMITTING SUCH A REPORT.  
IF THIS WILL BE DONE, THE U.S. WOULD ALSO APPRECIATE KNOWING AS  
PROMPTLY AS POSSIBLE APPROXIMATE LENGTH. THE U.S. RECOGNIZES  
THAT SOME PARTICIPANTS MAY PREFER TO SUBMIT COPIES OF A WRITTEN  
REPORT RATHER THAN REPORT ORALLY (WITH RELAYED SUBMISSION OF A  
WRITTEN COPY). TO FACILITATE CONSIDERATION OF THESE REPORTS AND  
TO ENHANCE THEIR BENEFIT FOR ALL PARTICIPANTS, IT IS THE U.S. HOPE  
THAT TWO COPIES OF YOUR COUNTRY'S REPORT (IN ENGLISH) CAN BE  
SUBMITTED IN ADVANCE OF THE MEETING SO THAT COPIES MAY BE MADE  
AVAILABLE TO PARTICIPANTS ON SEPTEMBER 17. THE REPORTS SHOULD BE

MAILED TO MR. MORTON C. SMITH, GROUP LEADER, Q-22, LOS ALAMOS  
SCIENTIFIC LABORATORY OF THE UNIVERSITY OF CALIFORNIA, P.O. BOX 1663,  
LOS ALAMOS, NEW MEXICO 87544.

I. THE U.S. LOOKS FORWARD TO YOUR COUNTRY'S PARTICIPATION IN THE  
LOS ALAMOS MEETING.

END INVITATION.

2. ACTION ADDRESSEES ARE REQUESTED TO ENCOURAGE FULL PARTICIPATION BY  
HOST COUNTRY OFFICIALS AND TO IDENTIFY PARTICIPANTS AS SOON AS  
POSSIBLE.

3. THE WORKING LANGUAGE OF THE MEETING WILL BE ENGLISH. IF RPT IF  
NECESSARY, U.S. CAN ARRANGE FOR SPANISH TRANSLATION ASSISTANCE.  
PLEASE ADVISE. KISSINGER

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## Message Attributes

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